



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

February 15, 2019

LU-16J

**VIA CERTIFIED MAIL #70173380000072833073**  
**AND ELECTRONIC MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Cary Mathias  
Regional Waste Manager  
ArcelorMittal USA  
4020 Kinross Lakes Parkway  
Richfield, OH 44286-9000

**Re: Verification Sampling and Analysis Plan**  
**ArcelorMittal, Indiana Harbor Long Carbon – East Chicago, Indiana**  
**EPA ID No. IND 005 159 199**

Dear Mr. Mathias

This letter is to inform you that EPA has reviewed the *Verification Sampling and Analysis Plan ArcelorMittal - Indiana Harbor Long Carbon East Chicago, Indiana* (SAP) submitted to EPA by ArcelorMittal Indiana Harbor East dated February 5<sup>th</sup>, 2019. ArcelorMittal is performing the activities described in the SAP to facilitate expediting the Corrective Action process for this Parcel. EPA's review focused on technical consistency and adherence to EPA policy and regulations.

Comments on the SAP are contained in the enclosed letter. Due to the accelerated time frame, ArcelorMittal expressed its intention to move forward with field activities as written in the SAP, barring any significant issues raised by EPA. EPA acknowledges this intention, however encourages ArcelorMittal to consider these comments during field activities. EPA requests that you review the comments and submit a response to EPA, along with an amended SAP, in the next 30 days. If you have any questions regarding this letter, feel free to contact me at (312)-353-9229 or Melissa Blankenship at (312)-886 9641.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Pursel", is written over a horizontal line.

Brandon Pursel  
Project Manager, Corrective Action Section 2  
Land and Chemicals

cc: Mark Pomfrey (Haley & Aldrich)  
John R. Hill (ArcelorMittal)

**EPA TECHNICAL REVIEW  
FEBRUARY 2019 VERIFICATION SAMPLING AND VERIFICATION PLAN  
INDIANA HARBOR LONG CARBON**

EPA has conducted a technical review of the February 2019 Verification Sampling and Analysis Plan (SAP) for the Indiana Harbor Long Carbon parcel (Parcel), which is subject to RCRA Corrective Action as part of the ArcelorMittal Indiana Harbor East facility (Facility) in East Chicago, Indiana. The Parcel is currently marketed for sale and redevelopment. ArcelorMittal is performing the activities in the SAP to facilitate expediting the Corrective Action process for this Parcel. Results of the SAP activities will be used to develop a conceptual site model and accompanying human health risk assessment to determine what actions are necessary to achieve Corrective Action requirements for the Parcel. These comments are preliminary in nature and subject to ongoing discussion with ArcelorMittal (AM) representatives and EPA's Human Health Risk Assessor.

**GENERAL COMMENTS**

None.

**SPECIFIC COMMENTS**

**Soil Boring Installation**

1. *Page 3: One soil sample from each soil boring will be collected from the surface (0 to 2 feet), and a second soil sample will be selected based on field observations and headspace screening or will be collected from the interval immediately above groundwater. Soil borings will be advanced to approximately 10 feet below surface grade depending on location and field conditions.*

**EPA Comment**

AM must explain why a depth of approximately 10ft below ground surface (bgs) was selected for the deepest soil samples and what locations/conditions may present with challenges to advancing to the goal depth of approximately 10 ft bgs. In addition, this AM should specify that subsurface soil will be analyzed based on the highest PID reading, or directly above the water table if all PID readings are at ambient levels. The SAP should also confirm which PID lamp will be used for field screening.

2. *Page 3: After collection, a portion of each sample will be retained for possible future chemical analysis.*

**EPA Comment**

ArcelorMittal should ensure that future analysis, if necessary, should follow all sample temperature and holding time requirements.

**Monitoring Well Installation and "First Water" Sampling**

3. *Page 4: To obtain a "first-water" sample, a soil boring will be advanced to approximately 5 feet below the interpreted depth of the groundwater table using 4.25-inch ID hollow stem augers.*

**EPA Comment**

Both shallow and deeper groundwater intervals should be sampled where appropriate and consistent with locations throughout the Facility. It appears ArcelorMittal is only proposing to evaluate shallow groundwater for contamination. The deeper wells should extend to the top of the confining unit beneath the Parcel to ensure heavier contaminants previously detected are considered.

**Table 1-Sample Summary Table**

**4. EPA Comment**

It is unclear why the parameters planned for evaluation vary between groundwater monitoring wells IFW-02-00022R, IMW-02-00001R and IMW-02-00004S. Please clarify.

**Figure 1-Proposed Soil Boring and Monitoring Well Locations**

**5. EPA Comment**

ArcelorMittal should consider adding at least two additional groundwater sampling locations along the unpaved area of the Parcel along the Indiana Harbor Shipping Canal. The additional data will ensure that the Parcel is characterized at the property boundaries to the extent practicable, in addition to the inland characterization described in the SAP. General locations EPA is proposing are annotated on Figure 1 of the SAP (attached) with red markings.

**Figure 1**

Proposed Soil Boring and Monitoring Locations





### LEGEND

- |               |   |   |
|---------------|---|---|
| IMW-03-00010S |  | MONITORING WELL LOCATION                                      |
| IMW-03-00038  |  | MONITORING WELL ABANDONED                                     |
| IFW-03-00038  |  | PROPOSED "FIRST WATER" SAMPLING LOCATION                      |
|               |  | PROPOSED SOIL BORINGS   |
|               |  | EXCEEDS COMMERCIAL EXPOSURE TO GROUNDWATER SCREENING CRITERIA |
|               |  | FENCE LINE  |
|               |  | PROPERTY LINE (APPROXIMATE)                                   |
|               |  | UNPAVED AREAS   |
|               |  | CLINT AVENUE BRIDGE, LLC PROPERTY                             |

## NOTES

1. PLAN BASED ON SURVEY AND BASE MAP ENTITLED "UTILITIES\_BASE\_IHE\_2017\_V2010.DWG" PROVIDED BY AECOM ON 24 AUGUST 2017.



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SCALE IN FEET

**HALEY  
ALDRICH**

ARCELORMITTAL INDIANA HARBOR LONG CARBON  
EAST CHICAGO, INDIANA

### PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS

SCALE: AS SHOWN  
DECEMBER 2018

FIGURE 1